

REMARKS/ARGUMENTS

Claims 1, 3, 4 and 6-9 are present in this application. By this Amendment, the Abstract, the specification and claims 1, 3, 4 and 6 have been amended, claims 2 and 5 have been canceled, and claims 8 and 9 have been added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

The drawings were objected to under 37 C.F.R. §1.83(a). With regard to the “annular flange liquid-tightly pressed on an inner surface of the opening of the tube-shaped specimen container,” claim 1 has been amended to omit reference to the “opening” of the container. With respect to claim 2, although claim 2 has been canceled by this Amendment, claim 1 recites that the inserting section includes a cylindrical body and a tapered annular flange projected from the cylindrical body. The tapered annular flanges B1, B2 are shown in, for example, Fig. 2. Withdrawal of the objection is requested.

Claims 1-7 were rejected under 35 U.S.C. §112, second paragraph. Without conceding this rejection, the claims have been amended to more clearly satisfy the requirements of 35 U.S.C. §112. Moreover, claim 1 has been amended to clarify that the tapered annular flange is liquid-tightly pressed on an inner surface of the container. Regarding claims 2 and 4-6, claims 2 and 5 have been canceled, and claims 4 and 6 have been amended to recite that the tapered annular flanges are projected from the cylindrical body of the inserting section at regular intervals along an axis of the cylindrical body. Withdrawal of the rejection is requested.

Claims 1-3 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 2,848,130 to Jesnig. This rejection is respectfully traversed.

The Jesnig patent discloses a pressure resistant closure that includes structure cooperating with particular components of the bottle 10 to purportedly effect a sealing arrangement. The

closure includes a slot 40 or channel 60 that assist the entering guide portion to be readily collapsible upon itself. The sloping guide surface steers the advancing end of the valve past the inner bead or ring 12 until the groove 32 registers generally with the bead 12, and the groove 32 snaps into place. Subsequently, the valve and bottle assume the general relative position indicated in Fig. 2 (see, e.g., column 6, lines 40-48). The valve of Jesnig is provided with the groove 32 into which the inner bead or ring 12 snaps. Without the radial bead or ring 12 in the bottle, the closure would not function properly.

In contrast, the stopper defined in claim 1 does not require the tube-shaped container to include an internal bead or ring. Indeed, regardless of the shape of the inner surface of the tube-shaped container, the annular flange can be liquid-tightly pressed thereon because the inserting section is formed from an elastically-deformable liquid-tight member. Moreover, because the annular flange is tapered, the stopper can accommodate tube-shaped containers of different sizes. Applicant thus respectfully submits that Jesnig lacks at least the structure wherein the tapered annular flange is liquid-tightly pressed on an inner surface of the tube-shaped container. Rather, the Jesnig closure requires a radial bead or ring 12 to function as intended, and the bottle 10 is thus not a tube-shaped container. Applicant thus respectfully submits that the rejection of claim 1 is misplaced.

With regard to dependent claim 3, Applicant submits that this claim is allowable at least by virtue of its dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1, 2 and 4 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 5,919,420 to Niermann et al. This rejection is respectfully traversed.

The closure 10 in the Niermann patent includes a generally spherical-shaped socket 40 and a cylindrical protrusion 47 depending from a bottom end of the closure 10. The cylindrical protrusion 47 is adapted for interfitting engagement within the open end 110 of the collection tube 100, thereby providing means for attaching the closure 10 to the collection tube 100 (see column 4, lines 15-19). The cylindrical protrusion 47 shown in Figs. 5-10 includes annular flanges 48. As recognized in the Office Action, the shapes of the annular flanges 48 perceived from Figures 6, 8 and 9 are hemispheric. Claim 1, however, recites that the inserting section comprises a cylindrical body and a tapered annular flange projected from the cylindrical body. Since Niermann lacks any such tapered annular flange, Applicant submits that the rejection is misplaced.

Moreover, Niermann does not teach whether the annular flanges 48 are or are not pressed on an inner surface of the collection tube. Niermann describes, however, that an elastomeric O-ring 70' forms an elastomeric seal in the embodiment illustrated in Figs. 5-9. As such, the flanges 48 are not required to perform a sealing function in the Niermann structure. The text of the Niermann patent in fact lacks reference to item 48. A conclusion that the flanges 48 perform a sealing function can thus only be derived in improper hindsight in view of Applicant's own disclosure. For this reason also, Applicant submits that the rejection of claim 1 is misplaced.

With regard to dependent claim 4, Applicant submits that this claim is allowable at least by virtue of its dependency on an allowable independent claim. Moreover, claim 4 recites that the inserting section includes a plurality of tapered annular flanges which are projected from the cylindrical body of the inserting section at regular intervals along an axis of the cylindrical body. The Niermann structure lacks even a single tapered annular flange, and Niermann thus also lacks the subject matter of claim 4.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1 and 4 were rejected under 35 U.S.C. §102(c) over U.S. Patent No. 6,890,488 to Mathus et al. This rejection is respectfully traversed.

In the Mathus patent, as shown in Figs. 7-9, the plugs 24 may be provided with one or more peripheral beads 42 designed to coact with internal grooves 16 in the upper regions of the test tubes (see column 3, lines 23-25). As shown in Fig. 16, the plugs 24 may also be provided with multiple vertically spaced circumferential beads 42 in order to achieve an enhanced interlocked relationship with the test tubes (see column 3, lines 33-36). These beads 42, however, are not liquid-tightly pressed on an inner surface of the tube-shaped container; rather, the test tubes described in Mathus include the internal grooves 16 in the upper region thereof, and the peripheral beads 42 engage with the grooves 16. Claim 1 recites that the inserting section includes a tapered annular flange projected from the cylindrical body such that a periphery of the tapered annular flange is liquid-tightly pressed on an inner surface of the container. At least this subject matter is lacking in Mathus, and Applicant thus respectfully submits that the rejection is misplaced.

Moreover, claim 1 recites that the annular flange is tapered, whereas the peripheral beads 42 in Mathus are not as shown in, for example, Fig. 9. For this reason also, Applicant submits that the rejection is misplaced.

With regard to dependent claim 4, Applicant submits that this claim is allowable at least by virtue of its dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 3 and 5-7 were rejected under 35 U.S.C. §103(a) over Niermann in view of Jesnig. With reference to the comments above concerning the Niermann patent, however,

Applicant submits that Jesnig does not correct the deficiencies noted. That is, neither Niermann nor Jesnig provides any suggestion to modify the Niermann structure to meet the features of the invention discussed above lacking in the Niermann patent. As such, Applicant submits that these dependent claims are allowable at least by virtue of their dependency on an allowable independent claim. Withdrawal of the rejection is requested.

Claim 9 has been added and defines structure similar to that defined in claim 1. As such, Applicant submits that claim 9 is allowable for at least the reasons discussed above with regard to claim 1.

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

Respectfully submitted,

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